

ABSTRACT

A wireless network adapter for establishing wireless communication links between electronic devices. In one embodiment, the wireless network adapter comprises wireless communication circuitry encased in a shell in the form of a detachable molding element of an electronic device. The wireless network adapter further comprises a bus connector adapted to couple the wireless communication circuitry to an expansion bus when the shell is attached to an outer surface of an electronic device. The wireless network adapter is a fully integrated solution further comprising an RF antenna for communication with a wireless network and a radio modem comprising a radio, a receiver, and modulation circuitry. The RF antenna in the wireless network adapter may take one of several forms. The antenna may be a dedicated unit housed within the shell of the wireless network adapter. Alternatively, the antenna may form a part of the outer shell of the adapter or it may form a part of a company logo located on the shell the adapter. The wireless network adapter is installed in an electronic device such as a portable computer. The electronic device comprises, at a minimum, a system microprocessor, an expansion bus, a read-writeable memory device, an input/output device, and an expansion port connected to the expansion bus that is configured to accept the detachable wireless network adapter. Another embodiment of the present invention comprises an electronic device equipped with an external sleeve configured to accept a wireless network adapter insert.